CATALYST COMPOSITION PREPARATION AND USE

Abstract

A bulk metal oxide catalyst composition of the general formula $(X)\,b\,(M)\,c\,(Z)\,d\,(O)\,e \qquad (I)$ wherein

X represents at least one non-noble Group VIII metal;

10 M represents at least one non-noble Group VIb metal;

Z represents one or more elements selected from aluminium, silicon, magnesium, titanium, zirconium, boron, and zinc;

one of b and c is the integer 1;

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d and e and the other of b and c each are a number greater than 0 such that the molar ratio of b:c is in the range of from 0.5:1 to 5:1, the molar ratio of d:c is in the range of from 0.2:1 to 50:1, and the molar ratio of e:c is in the range of from 3.7:1 to 108:1; is prepared by controlled (co)precipitation of component metal compounds, refractory oxide material, and alkali compound in protic liquid. Resulting compositions find use in

25 hydrodesulphurisation and hydrodenitrification.

hydrotreatment processes involving particularly

TS1224.doc 55